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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,268	03/23/2002	Charles Eldering	T708-13	4098
27832	7590	04/06/2006	EXAMINER	
TECHNOLOGY, PATENTS AND LICENSING, INC./PRIME 2003 SOUTH EASTON RD SUITE 208 DOYLESTOWN, PA 18901			BROWN, RUEBEN M	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/031,268		ELDERING ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Reuben M. Brown		2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-55 and 58-145 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-55 and 58-145 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 9-17, 19-26 & 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Bryant, (U.S. Pat # 5,652,615).

Considering claim 1, the amended claimed 'advertising management system for managing insertion of advertisements in video streams, comprising an avail opportunities module for recognizing one or more opportunities within the video steams available for advertisements' reads on Bryant (col. 3, lines 26-40; col. 4, lines 21-64). Bryant discusses that the studio 110 composites broadcasts programs, which includes the main programs and advertisements, inserted

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commercials in the avail that is appropriate according to the desired geographic area and/  
demographic make-up of the area or subscriber(s).

The claimed 'ad characterization module that characterizes advertisements' is inherent in Bryant, col. 2, lines 17-26 & col. 8, lines 49-54, since the reference teaches that the advertisement are organized and transmitted based on content categories.

Thus the 'amended claimed correlation module for determining a match between an avail and an advertisement, wherein the match is determined at least in part by correlating available subscriber characteristics with the advertisement' reads on the disclosures of Bryant, col. 2, lines 32-36; col. 4, lines 10-20 & col. 7, lines 60-68.

Considering claim 2, Fig. 8 of Bryant is an example of the system listing the avail opportunities such as A, B, C, & D; col. 8, lines 35-49..

Considering claim 3, the subject matter is met by Bryant, col. 3., lines 1-40.

Considering claims 4-7, 11-13 & 26, Bryant, col. 3., lines 1-40 & col. 10, lines 10-58 discloses all subject matters.

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Considering claims 14-15, the percentile of potential subscribers to transmit a particular commercial is deterministic range, based on the instant subscribers having a higher probability of purchasing the advertised item, (col. 6, lines 9-21).

Considering claims 16-17, 19-26, Bryant teaches that the subscriber profile data may be determined and entered into the system. It would have been obvious for an operator to enter any data manually, at least for the known purpose of being able to manually proofread the instant data.

Considering claims 38-39, the subject matter is inherently found in Bryant.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8, 18 & 27-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant.

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Considering claims 8 & 18, Bryant teaches that the cable operator enters information regarding advertisement data, but does not discuss it being manual or using a GUI. Official Notice is taken that at the time the invention was made, the use of GUI interface to enter data was old in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Bryant with the known feature of a GUI, at least in order to more efficient data entry.

Considering claims 27-28, Bryant does not discuss the algorithm used to determine the match. Official Notice is taken that multiplying values and then summing the results was known in the art at the time the invention was made. It would have been obvious to modify Bryant, with any number of algorithms for more efficiently determining the most appropriate audience for a commercial.

Considering claim 29, Official Notice is taken that at the time the invention was made technology for protecting subscriber privacy was well known in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Bryant, with the well known technology of protecting subscriber privacy, for the desirable advantage of ensuring that subscriber personal information is only processed by authorized entities.

Considering claims 30-37, Bryant directed to systems that sell commercial time to advertisers, presumably using a profit making business model, but does not discuss auctioning. Official Notice is taken that auctions were old in the art, at the time the invention was made. It would have been obvious to utilize auction or Internet sales model at least for the desirable benefit of reaching a wider audience of potential advertisers.

6. Claims 40-55 & 58-145 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carles, (U.S. Pat # 5,518,098), in view of Balakrishnan, (U.S. pat # 6,473,903).

Considering claim 40, regarding the claimed apparatus for inserting advertisements in a video stream, comprising an ad manager for receiving one or more advertisements from one or more sources and managing the ad insertion process. Carles teaches that the video server 10 has access to library of commercials 38, and overall controls the process, see col. 3, lines 1-60.

Furthermore, Carles teaches that a data stream including programming and commercial messages is generated at the server 10. (Abstract: col. 2, lines 35-67) but does not explicitly discuss the method of transmission to subscribers 15. Nevertheless, Balakrishnan teaches transmitting one or more programs simultaneously in a multiplexing algorithm, (col. 3, lines 25-60 & col. 4, lines 10-55). It would have been obvious for one

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ordinary skill in the art at the time the invention was made, to modify Carles with the featuring of channel multiplexing of content as taught by Balakrishnan, at least for the desirable benefit of avoiding the use of upstream technology in retrieving the requested content.

Balakrishnan is compatible with Carles, since they both transmit advertisement adapt to a subscriber such the STB may decide on which advertisement is actually viewed.

Considering claims 41-43, the video server 10 accesses the library of commercials 38, it would have been obvious for the library of the commercials to be local or remote form the video server 10.

Considering claim 44, the video server receives programs from on or more sources at least in a digital format and forwards them to subscribers, (col. 4, lines 50-60).

Considering claims 45-46, the system of Carles is enabled to process signals in a compressed, digital format or analog format, col. 4. lines 36-60.

Considering claim 47, Carles operates in real-time, col. 4, lines 18-27.

Considering claim 48. Carles inherently buffers the commercials until they are transmitted.



Considering claims 49-51, Carles necessarily includes a means for synchronizing commercials with broadcast programming.

Considering claim 52, Carles utilizes computers and therefore necessarily is deployed with some manner of software, col. 2, lines 54-57.

Considering claims 53-54, Carles is directed to a system for recognizing one or more advertisement opportunities in a broadcast program, (col. 3. lines 30-40) determining one or more characteristics of a subscriber & an advertisement, (col. 4, lines 66-67 thru col. 5, lines 1-30) and correlating and advertisement with a subscriber according to the characteristics of each, (Abstract; col. 9, lines 21-25).

Considering claim 55, at the time the invention was made technology for protecting subscriber privacy was well known in the art. It would have been obvious for one ordinary skill in the art at the invention was made, to modify Carles, with the well known technology of protecting subscriber privacy, for the desirable advantage of ensuring that subscriber personal information is only processed by authorized entities.

Considering claims 58 & 127-128, the combination of Carles and Balakrishnan teaches transmitting commercials along with broadcast programming, in real time (col. 2,

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lines 48-64; col. 4, lines 51-60). Balakrishnan teaches TDM, which uses statistical multiplexing.

Considering claim 59, see Carles col. 3, lines 55-63.

Considering claims 60 & 78-80, it would have been obvious to set a price for the advertisements based on any number of profit making algorithms.

Considering claims 61-65, see Carles (col. 4, lines 66-67 thru col. 5, lines 1-30).

Considering claims 66-68, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the parameters utilized to profile subscribers, at least for the desirable benefit of more accurately describing the user.

Considering claim 69, Carles discloses grouping subscribers, col. 9, lines 21-30.

Considering claims 70-72, see Carles col. 3, lines 1-30.

Considering claim 73-74, deriving a value of an item based on a weighted average was a well known technique at the time the invention was made. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify

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Carles with the well known technique of using weighted values, at least in order to determine the relative strength of the particular categories.

Considering claim 75-77, Carles discloses all subject matter.

Considering claims 81-84, Carles is directed to profiling individuals, households and demographic groups of subscribers, (col. 1, lines 15-67; col. 3, lines 41-55; col. 9, lines 21-30).

Considering claims 86-89, 100-101, 127 & 129, Carles discloses inserting selected advertisements in program streams in order to generate one or more multiplexed digital stream, in a synchronized manner (col. 4, lines 35-65).

Considering claim 85, it would have been obvious to utilize Nielsen ratings in profiling subscribers.

Considering claims 90-94, 102-107 & 142-143, the commercials are inserted into the bit stream of the broadcast programming, which requires that the bit rates are synchronized, (col. 3, lines 55-62).

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Considering claims 95-97, 108-110 & 132, it would have been obvious to linearize the commercials and programs to the same unit values, at least for the desirable advantage of more efficiently combining the two or more streams.

Considering claims 98, 111 & 131. the commercials may be inserted on demand, i.e., in an asynchronous manner.

Considering claim 99, Carles discloses all subject matter.

Considering claims 112-115, see Carles (Abstract).

Considering claims 116-118. see Carles (Abstract; col. 3, lines 15-41).

Considering claims 119-125, it would have been obvious to transmit the commercials in any number of well known data transmission algorithm, either with or concurrent with video data for the benefit of more efficiently utilizing the system.

Considering claims 126 & 141, the claimed method of targeting advertisements to subscribers corresponds with subject matter mentioned above in the analysis of claims 40 & 53, and is likewise analyzed.

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Considering claim 133, available bit rate technology was very well known in the art at the time the invention was made. It would have been obvious to utilize ABR technology at least for the advantage of more efficiently preserving channel bandwidth.

Considering claims 134-135, 137 & 140, see Carles (Abstract & col. 5, lines 1-40).

Considering claims 136, 138-139 & 144-145; see Freeman (col. 4, lines 15-18 & col. 6. lines 45-68).

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Hite Teaches transmitting commercial to viewers base don demographics.

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**Any response to this action should be mailed to:**

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**Or:**


(571) 273-7290 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F (9:00-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reuben M. Brown

  
**REUBEN M. BROWN**  
**PATENT EXAMINER**